What is Claimed is:

1. A fuel cell system equipped with a fuel cell, said fuel cell system comprising:

a temperature detector that detects the fuel cell operating temperature, wherein the fuel cell operating temperature is a temperature that reflects the internal temperature of said fuel cell;

a temperature-maintenance operation controller that, if said detected fuel cell operating temperature equals or is less than a first reference temperature while said fuel cell system is not operating, executes temperature-maintenance operation of said fuel cell;

an abnormality determination unit that determines whether a detection abnormality regarding said fuel cell operating temperature has occurred in said temperature detector; and

a warning issuance unit that issues a warning when said abnormality determination unit determines an abnormality has occurred in said temperature detector.

2. A fuel cell system according to Claim 1, wherein said temperature-maintenance operation controller stops said temperature-maintenance operation when said fuel cell operating temperature detected by said temperature detector during said temperature-maintenance operation of the fuel cell equals or exceeds a second reference temperature which is higher than said first reference temperature.

3. A fuel cell system according to Claim 2, wherein said fuel cell system includes a plurality of said temperature detectors,

said abnormality determination unit determines whether an abnormality has occurred in each of said plural temperature detectors, and

when said abnormality determination unit determines an abnormality has occurred in any of said plural temperature detectors, said temperature-maintenance controller performs control pertaining to said temperature-maintenance operation based on the result of detection by the other temperature detectors as to which no abnormality was determined to exist.

4. A fuel cell system equipped with a fuel cell, said fuel cell system comprising:

a plurality of temperature detectors that detect a fuel cell operating temperature, wherein the fuel cell operating temperature is a temperature that reflects the internal temperature of said fuel cell;

an abnormality determination unit that determines whether a detection abnormality has occurred regarding said fuel cell operating temperature in any of said plural temperature detectors; and

a temperature-maintenance operation controller that, when said abnormality determination unit determines that an abnormality has occurred in any of said temperature detectors while said fuel cell system is not operating, executes temperature-maintenance operation of said fuel cell if said detected fuel cell operating temperature as detected by remaining temperature detectors that are determined that no abnormality has been occurred by said abnormality determination unit equals or is less than a first reference temperature.

5. A fuel cell system according to Claim 4, wherein said temperature-maintenance controller terminates said temperature-maintenance operation if any of said fuel cell operating temperature, which is detected by the remaining temperature detectors during said temperature-maintenance operation, equals or exceeds a second reference temperature that is higher than said first reference temperature.

6. A fuel cell system according to Claim 1, wherein said abnormality determination unit determines that an abnormality exists when a signal indicating disconnection or short-circuit is output from said temperature detector.

7. A fuel cell system according to Claim 2, wherein said abnormality determination unit determines that an abnormality exists when a signal indicating disconnection or short-circuit is output from said temperature detector.

8. A fuel cell system according to Claim 3, wherein said abnormality determination unit determines that an abnormality exists when a signal indicating disconnection or short-circuit is output from said temperature detector.

9. A fuel cell system according to Claim 4, wherein said abnormality determination unit determines that an abnormality exists when a signal indicating disconnection or short-circuit is output from said temperature detector.

10. A fuel cell system according to Claim 5, wherein said abnormality determination unit determines that an abnormality exists when a signal indicating disconnection or short-circuit is output from said temperature detector.

11. An operation method for a fuel cell system that detects the fuel cell operating temperature, which is a temperature that reflects the internal temperature of the fuel cell, and executes temperature-maintenance operation of the fuel cell where the detected fuel cell operating temperature equals or falls below a first reference temperature, said method comprising:

determining whether an abnormality has been occurred in the temperature detector that detecting said fuel cell operating temperature when said fuel cell operating temperature is detected; and

issuing a warning when an abnormality is detected in said temperature detector.

12. A fuel cell system operation method according to Claim 11 further comprising:

detecting the fuel cell operating temperature while said fuel cell is in a temperature-maintenance operation; and

stopping said temperature-maintenance operation when said detected fuel cell temperature equals or exceeds a second reference temperature that is higher than said first reference temperature.